# Town of La Pointe Alternative Energy Committee May 15, 2015

Members present: Larry Bean, Chair; Glenn Carlson, Tom Banner and Burke Henry by

speaker phone.

Members absent: Carl Frederickson

Also present: Public present:

#### 1. Call to order.

The Alternative Energy Committee meeting called to order by Chair L. Bean on Friday, May 15, 2015 at 10:02 am at the Town Hall. A quorum of the committee is present as reflected in the members listed above.

### 2. Minutes of the following meetings to be considered for approval:

### A. March 6, 2015.

Motion by B. Henry to approve the March 6, 2015 Alternative Energy Committee minutes as presented, second, T. Banner. All in favor, all aye, motion carried.

## 3. Energy changes for the Town.

L. Bean said he anticipated having Pete Clark, Town Administrator at this meeting to talk about propane but since he is no longer with us Lisa Potswald, Planning and Zoning Administrator/Grant Writer has agreed to meet with us later.

Pretty encouraged by what has been done by Town staff: The Library has completed the insulation of the crawl space as recommended by this committee the lighting change out to compact fluorescents and LEDs has been completed. The Town Foreman has taken it upon himself to build a vestibule for the Town Hall that will be fully operational next winter. He also made a two inch foam board to go over the front entry and if you talk to Waggie she will tell you how big a difference that made in the temperature of this room. The road crew will change out the parking lot lights and dock lights to LEDs in the next four to six weeks. This committee has had a number of recommendations accomplished by employees of the town so our congratulations and appreciation to them.

#### 4. Emergency planning.

We have a memo from Burke in our packet in regards to the Emergency Plan revision memo dated November, 2013.

- B. Henry said he was asked by the Town Board to look at the original 2002 Emergency Plan and make recommendations to update the plan. B. Henry met with a group of people involved in emergency services and discussed what emergency planning is, and the kind of emergencies that could happen in the Town. B. Henry then modeled his recommendations to the Town Board on the Federal outline for an Emergency Plan. Because the Ashland County Emergency Planner was to re-do the Ashland County in 2014, B. Henry suggested waiting to update the Town's Emergency Plan until the Ashland County Emergency Plan was completed. That way the Town of La Pointe plan could be inserted into the Ashland County plan.
- B. Henry presented his memo of recommendations to Pete Clark, Town Administrator which was passed to the Town Board as if the suggested recommendation were the new Emergency

Plan. At the August 12, 2014 Town Board meeting the Town Board rescinded the 2002 plan and replaced the 2002 plan with the recommendations. So, at this time, the Town does not have an Emergency Plan; the Town has only an approved memo of recommendations. B. Henry has brought this to the Town Board's attention but the Emergency Plan has not been re-written to 2014.

A small group of people will now have to spend a good amount of time with the Ashland County Emergency Planner to review the Ashland County plan and insert the Town of La Pointe into the County plan. This document will then have to mesh with the Federal outline and go before the Town Board for their consideration.

Question if the Ashland County Emergency plan has been re-written. This needs to be found out.

B. Henry said as far as what an emergency is on the Island the one that occurred during the February storm would be considered an emergency. There was no power for 3-5 days with limited travel across the ice. In such an emergency, food, water, heat, bedding, toilet facilities, and a place to house people at the EMS building or the La Pointe School would be required for that period of time. An emergency such as this could be covered by generator power and stored propane, not by batteries.

Another emergency could happen in summer when a large tour bus overturned causing multiple injuries and requiring hospitalization. That type of an emergency is different from the February storm.

Question of who could pick up the Emergency Plan recommendations. B. Henry said the EMTs, Fire Dept and Police Dept but the people involved in EMS are already pretty committed. The original 2002 Town of La Pointe Emergency plan was written by Michael Anderson, former police chief.

L. Bean said the reason we are talking about emergency plans is that solar microgrids do have a record of maintaining operations in an emergency such as the February storm. The committee needs to find out if an emergency is a factor in terms of the design and implementation of the work Chippewa Valley Alternative Energy (CVAE) has done for us.

There are five backup generators in town: a 25 kW system at the airport provided by the Bureau of Aeronautics. The old 17kW system at the airport has been moved behind the Town Hall and is not operating. There is a generator for the EMS building and the Winter Transportation buildings; 22kW or 25kW and a 17kW generator behind the clinic. Someone has deduced that these facilities should continue to operate in an emergency.

Question if these five generators would be adequate to keep facilities running. A microgrid expert could determine that and John Carroll, who is part of the firm that is installing microgrids on military bases and remote communities has offered to come here on his dime and review our operations. John has reviewed the material from CVAE and said the prices are high, but he needs to see and know what we have in terms of the size of the generators. Question if Xcel could answer that question. To be noted is that the Madeline Sanitary District does not have a backup generator to deal with waste.

An agreement had been started between the school and the town, in regards to using the School as a site for an emergency. Ashland has a trailer with food, and water storage that they use for emergencies. A trailer would be required whether you had a microgrid or generator.

Until we actually have an Emergency Plan in place we will not know if a microgrid or using existing facilities would be the best way to go. Solar microgrids on islands and remote places are gaining a lot of momentum around the country and world.

Discussion that emergency preparedness is a piece but not the whole piece.

You could look at a solar microgrid as just the energy production component for the island and forget the emergency part. A microgrid is there all the time producing energy. On a cloudy day there is battery storage and/or a propane generator to produce energy for the Island so this is not really linked to emergency preparedness; you are actually producing power for the island as opposed to net metering.

Question of what the incremental cost would be going from several solar arrays vs. putting in the infrastructure for a microgrid – would that double the cost? We need John Carroll or the two engineers at the UW Madison to answer that question.

A residence needs about 7kW. Cost to be completely free of the grid would be \$3,000.00 plus \$15,000 - \$20,000 in solar installation costs.

L. Bean met with the Library Board and we do have prices for a solar array for the Library and Clinic and also the price of a combined solar array for both. There is a 17kW generator behind the Clinic. Might want some battery storage also but it is done; this is a microgrid; their energy system is complete.

Question of the issue of combining systems when electric wires have to cross the road. If each building had a standalone system that would not be a problem. One system could also go all the way from the landfill to Town. CVAE gave us a full scale approach which included the Airport and Big Bay Town Park but that would be too expensive. The Madeline Sanitary District wants to hold back at this time.

- G. Carlson said after L. Bean left the Library Board meeting there appeared to be a consensus to move forward. The cost for the Library/Clinic project is estimated at \$50,000 \$60,000; the Library by itself is about \$42,000.
- B. Henry suggested finding out how many kWs we would we need to provide shelter for a 3-5 day emergency in February with buildings warmed to 50 degrees. Find out the cost for generators and the cost of solar.

Question if the school has a generator.

Lisa Potswald is now present to talk about energy changes in the town in the last 6 months. Lisa said, according to the Town Board minutes, that the Town put out a bid for propane; Gene Nelson was the only and lowest bidder. Gene later had an issue with the language in the contract. The Town tried to resolve the issue in October and November and started to be concerned about the Town's municipal propane supply for the winter. Pete Clark called Midland in Ashland, Midland came to the Island, presented information regarding propane delivery and the Town Board finalized the Midland propane delivery. L. Bean asked if the Town now has new tanks, a new infrastructure and a new supplier. Lisa said yes, she understands the tanks are Midland tanks. Some of the tanks will have to be moved and all of the tanks have to be fenced in so there will be more expenses. L. Bean said he heard that there is a two year payback for the tanks which would be significant because that would impact projects the committee was looking into to replace propane with a wood gasifier for the Emergency Services Building.

This would also impact the taxpayer because the taxpayers have paid money for this change out. If this is a two year payback, this could be ok. Lisa will follow up on the two year payback and also check with Midland.

### 5. Review of Chippewa Valley Alternative Energy (CVAE) work.

There is an article from the Ashland Daily Press in everyone's packets showing Bill Bailey standing in front of two gasifiers that have been running flawlessly for several years. The technology is out there and can be used effectively.

In regards to CVAE, the Town needs three bids, minimum.

L. Bean said there is a hydronic system in EMS and WT that is unused. This is very efficient, high quality heating. He went to Duluth and looked at an outdoor wood fire boiler that was belching smoke; that would not work. A wood gasifier, however, burns at such a high temp there are no emissions. The gasifier we would use would require 32 cords of wood a year, oak, maple or birch for the EMS and WT buildings. He talked to Evan who processes firewood and Evan has to buy wood from the mainland as there is not enough hardwood on the Island so this needs more analysis.

## 6. Next steps.

John Carroll has offered to come from New Jersey to the Island on his own dime to review our data and buildings as part of his normal business overhead to find business. L. Bean has talked to John several times and has sent a lot of data to him. L Bean has also asked CVAE to be as cooperative as they could. L. Bean proposes that the committee invite John Carroll to the Island. Motion by G. Carlson to invite John Carroll to the Island, second, L. Bean. All in favor, all aye, motion carried.

B. Henry said there had been a conversation last fall between Pete Clark and the David Aslyn, School District Administrator in regards to using the school gym in case of an emergency but nothing has been officially done. L. Bean said when he talks to the Town Board he will emphasize this. G. Carlson said he cautions not to put all our eggs in one basket with the school in regards to an emergency. As with the Library and Clinic, a solar system could be justified on long term economic grounds with emergency preparedness as a side benefit.

Would like to plan a trip to Madison. L. Bean will talk to Barb Nelson, Administrative Assistant, to see how much is in the AEC budget. Committee will discuss the Madison trip after John Carroll has been here.

#### 7. Set next meeting and agenda.

Next meeting will be scheduled when John Carroll arrives. His report will be the only agenda item.

### 8. Adjourn.

Motion by T. Banner to adjourn, second, G. Carlson. All in favor, all aye, motion carried. Meeting adjourned at approximately 10:05 am.

Minutes taken from recorder and respectfully submitted by Kathy Erickson, Clerical Assistant.

Minutes approved as presented August 27, 2015